Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1641cxc

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	JUL 28	CA/CAplus patent coverage enhanced
NEWS 3	JUL 28	EPFULL enhanced with additional legal status information from the epoline Register
NEWS 4	JUL 28	IFICDB, IFIPAT, and IFIUDB reloaded with enhancements
NEWS 5	JUL 28	STN Viewer performance improved
NEWS 6	AUG 01	INPADOCDB and INPAFAMDB coverage enhanced
NEWS 7	AUG 13	CA/CAplus enhanced with printed Chemical Abstracts page images from 1967-1998
NEWS 8	AUG 15	CAOLD to be discontinued on December 31, 2008
NEWS 9	AUG 15	CAplus currency for Korean patents enhanced
NEWS 10	AUG 27	CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information
NEWS 11	SEP 18	Support for STN Express, Versions 6.01 and earlier, to be discontinued
NEWS 12	SEP 25	CA/CAplus current-awareness alert options enhanced to accommodate supplemental CAS indexing of exemplified prophetic substances
NEWS 13	SEP 26	WPIDS, WPINDEX, and WPIX coverage of Chinese and and Korean patents enhanced
NEWS 14	SEP 29	IFICLS enhanced with new super search field
NEWS 15	SEP 29	EMBASE and EMBAL enhanced with new search and display fields
NEWS 16	SEP 30	CAS patent coverage enhanced to include exemplified prophetic substances identified in new Japanese-language patents
NEWS 17	OCT 07	EPFULL enhanced with full implementation of EPC2000
NEWS 18	OCT 07	Multiple databases enhanced for more flexible patent number searching
NEWS 19	OCT 22	Current-awareness alert (SDI) setup and editing enhanced
NEWS 20	OCT 22	WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT Applications
NEWS 21	OCT 24	CHEMLIST enhanced with intermediate list of pre-registered REACH substances
NEWS 22	NOV 21	CAS patent coverage to include exemplified prophetic substances identified in English-, French-, German-, and Japanese-language basic patents from 2004-present
NEWS 23	NOV 26	MARPAT enhanced with FSORT command
NEWS 24	NOV 26	MEDLINE year-end processing temporarily halts availability of new fully-indexed citations
NEWS 25	NOV 26	CHEMSAFE now available on STN Easy
NEWS 26	NOV 26	Two new SET commands increase convenience of STN searching

```
 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

 NEWS HOURS     STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN     Welcome Banner and News Items
 NEWS IPC8      For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 16:47:42 ON 30 NOV 2008

=> file .meeting
'EVENTLINE' IS NOT A VALID FILE NAME
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available.  If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.
ENTER A FILE NAME OR (IGNORE):ignore
'IMSDRUGCONF' IS NOT A VALID FILE NAME
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available.  If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.
ENTER A FILE NAME OR (IGNORE):ignore
'MEDICONF' IS NOT A VALID FILE NAME
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available.  If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.
ENTER A FILE NAME OR (IGNORE):ignore
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'AGRICOLA' ENTERED AT 16:48:01 ON 30 NOV 2008

FILE 'BIOTECHNO' ENTERED AT 16:48:01 ON 30 NOV 2008
COPYRIGHT (C) 2008 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'CONFSCI' ENTERED AT 16:48:01 ON 30 NOV 2008
COPYRIGHT (C) 2008 Cambridge Scientific Abstracts (CSA)

FILE 'HEALSAFE' ENTERED AT 16:48:01 ON 30 NOV 2008
COPYRIGHT (C) 2008 Cambridge Scientific Abstracts (CSA)


FILE 'LIFESCI' ENTERED AT 16:48:01 ON 30 NOV 2008
COPYRIGHT (C) 2008 Cambridge Scientific Abstracts (CSA)


FILE 'PASCAL' ENTERED AT 16:48:01 ON 30 NOV 2008
```

=> (glutathione transferase omega 1)
L1 0 FILE AGRICOLA
L2 1 FILE BIOTECHNO
L3 0 FILE CONFSCI
L4 0 FILE HEALSAFE
L5 0 FILE LIFESCI
L6 1 FILE PASCAL

TOTAL FOR ALL FILES
L7 2 (GLUTATHIONE TRANSFERASE OMEGA 1)

=> d l7 ibib abs total

L7 ANSWER 1 OF 2 BIOTECHNO COPYRIGHT 2008 Elsevier Science B.V. on STN
ACCESSION NUMBER: 2000:30626584 BIOTECHNO
TITLE: Identification, characterization, and crystal structure of the omega class glutathione transferases
AUTHOR: Board P.G.; Coggan M.; Chelvanayagam G.; Easteal S.; Jermiin L.S.; Schulte G.K.; Danley D.E.; Hoth L.R.; Griffor M.C.; Kamath A.V.; Rosner M.H.; Chrunyk B.A.; Perregaux D.E.; Gabel C.A.; Geoghegan K.F.; Pandit J.
CORPORATE SOURCE: P.G. Board, Molecular Genetics Group, John Curtin Sch. of Medical Research, Australian National University, Canberra, Australian Cap. Terr. 2601, Australia. E-mail: Phillp.Board@anu.edu.au
SOURCE: Journal of Biological Chemistry, (11 AUG 2000), 275/32 (24798-24806), 61 reference(s) CODEN: JBCHA3 ISSN: 0021-9258
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 2000:30626584 BIOTECHNO
AB A new class of glutathione transferases has been discovered by analysis of the expressed sequence tag data base and sequence alignment. Glutathione S-transferases (GSTs) of the new class, named Omega, exist in several mammalian species and Caenorhabditis elegans. In humans, GSTO 1-1 is expressed in most tissues and exhibits glutathione-dependent thiol transferase and dehydroascorbate reductase activities characteristic of the glutaredoxins. The structure of GSTO 1-1 has been determined at 2.0-Å resolution and has a characteristic GST fold (Protein Data Bank entry code leem). The Omega class GSTs exhibit an unusual N-terminal extension that abuts the C terminus to form a novel structural unit, Unlike other mammalian GSTs, GSTO 1-1 appears to have an active site cysteine that can form a disulfide bond with glutathione.

L7 ANSWER 2 OF 2 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2008-0067865 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 2008 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Polymorphism of glutathione transferase Omega 1 in a population exposed to a high environmental arsenic burden
AUTHOR: PAIVA Leiliane; MARCOS Ricard; GREUS Amadeu; GOGGAN

Marjorie; OAKLEY Aaron J.; BOARD Philip G.
CORPORATE SOURCE: Group of Mutagenesis, Department of Genetics and Microbiology, Universitat Autonoma de Barcelona, Spain; CIBER Epidemiologia y Salud Publica, ISCIII, Spain; John Curtin School of Medical Research, Australian National University, Australia; Research School of Chemistry, Australian National University, Canberra, Australia
SOURCE: Pharmacogenetics and genomics : (Print), (2008), 18(1), 1-10, 41 refs.
ISSN: 1744-6872
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United States
LANGUAGE: English
AVAILABILITY: INIST-26284, 354000174392180010
AN 2008-0067865 PASCAL

AB Objectives and methods The aim of this study was to investigate genetic variation in glutathione transferase omega 1 (GSTO1-1) in Atacamenos, an indigenous population from Chile that has been exposed to environmental arsenic for many generations. GSTO1-1 is thought to catalyse the rate-limiting step in the biotransformation of arsenic in humans and may modulate the response of cancer patients to arsenic trioxide therapy. Allele frequencies were determined by PCR-based methods and a polymorphic variant (GSTO1-1 Val236) was expressed in Escherichia coli and functionally characterized. Urinary arsenic profiles were determined by inductive coupled plasma/mass spectrometry. Results A novel allele resulting in an Ala236Val substitution that has not been functionally characterized was detected in Atacamenos and Chilean participants at a frequency of 0.033 and 0.009, respectively. The Val236 isoenzyme has diminished specific activity (10-20%) with a range of substrates. This loss of activity appears to result from a decrease in the k.sub.c.sub.a.sub.t. The Val236 variant is also unstable and rapidly loses activity during purification or when heated at 45°C. The percent of inorganic arsenic in the urine of 205 Chilean participants showed a bimodal distribution that was not associated with the Ala140Asp, Glu155del or Ala236Val polymorphisms in GSTO1-1. Conclusion It is likely that heterozygotes inheriting the Val236 variant subunit would have a partial deficiency of GSTO1-1 activity. Despite their effects on enzyme function the known variants of GSTO1-1 do not appear to explain the observed variability in the excretion of inorganic arsenic.

=> FHR-1
L8 1 FILE AGRICOLA
L9 6 FILE BIOTECHNO
L10 0 FILE CONFSCI
L11 0 FILE HEALSAFE
L12 9 FILE LIFESCI
L13 3 FILE PASCAL

TOTAL FOR ALL FILES
L14 19 FHR-1

=> l14 and (coronary or atherosclerosis or angiographic or (heart failure))
L15 0 FILE AGRICOLA
L16 0 FILE BIOTECHNO
L17 0 FILE CONFSCI
L18 0 FILE HEALSAFE

```
L19           0 FILE LIFESCI
L20           0 FILE PASCAL

TOTAL FOR ALL FILES
L21           0 L14 AND (CORONARY OR ATHEROSCLEROSIS OR ANGIOGRAPHIC OR (HEART
                FAILURE))

=> l14 and heart
L22           0 FILE AGRICOLA
L23           0 FILE BIOTECHNO
L24           0 FILE CONFSCI
L25           0 FILE HEALSAFE
L26           0 FILE LIFESCI
L27           0 FILE PASCAL

TOTAL FOR ALL FILES
L28           0 L14 AND HEART

=> l14 and artery
L29           0 FILE AGRICOLA
L30           0 FILE BIOTECHNO
L31           0 FILE CONFSCI
L32           0 FILE HEALSAFE
L33           0 FILE LIFESCI
L34           0 FILE PASCAL

TOTAL FOR ALL FILES
L35           0 L14 AND ARTERY

=> l14 and (cardiovascular)
L36           0 FILE AGRICOLA
L37           0 FILE BIOTECHNO
L38           0 FILE CONFSCI
L39           0 FILE HEALSAFE
L40           0 FILE LIFESCI
L41           0 FILE PASCAL

TOTAL FOR ALL FILES
L42           0 L14 AND (CARDIOVASCULAR)

=> (CORONARY OR ATHEROSCLEROSIS OR ANGIOGRAPHIC OR (heart failure) or
cardiovascular) and (SPP-24)
L43           0 FILE AGRICOLA
L44           0 FILE BIOTECHNO
L45           0 FILE CONFSCI
L46           0 FILE HEALSAFE
L47           0 FILE LIFESCI
L48           0 FILE PASCAL

TOTAL FOR ALL FILES
L49           0 (CORONARY OR ATHEROSCLEROSIS OR ANGIOGRAPHIC OR (HEART FAILURE)
                OR CARDIOVASCULAR) AND (SPP-24)

=> (complement factor H-related protein 1)
L50           0 FILE AGRICOLA
L51           0 FILE BIOTECHNO
L52           0 FILE CONFSCI
L53           0 FILE HEALSAFE
L54           1 FILE LIFESCI
L55           2 FILE PASCAL
```

TOTAL FOR ALL FILES
L56 3 (COMPLEMENT FACTOR H-RELATED PROTEIN 1)

=> d l56 ibib abs total

L56 ANSWER 1 OF 3 LIFESCI COPYRIGHT 2008 CSA on STN
ACCESSION NUMBER: 2008:38172 LIFESCI
TITLE: Novel Serum Biomarker Candidates for Liver Fibrosis in Hepatitis C Patients
AUTHOR: Gangadharan, Bevin; Antrobus, Robin; Dwek, Raymond A.; Zitzmann, Nicole
CORPORATE SOURCE: Oxford Antiviral Drug Discovery Unit, Oxford Glycobiology Institute, Department of Biochemistry, University of Oxford, Oxford, United Kingdom
SOURCE: Clinical Chemistry [Clin. Chem.], (20071000) vol. 53, no. 10, pp. 1792-1799.
ISSN: 0009-9147.
DOCUMENT TYPE: Journal
FILE SEGMENT: V
LANGUAGE: English
SUMMARY LANGUAGE: English
AB BACKGROUND: Liver biopsy is currently the gold standard for assessing liver fibrosis, and no reliable noninvasive diagnostic approach is available. Therefore a suitable serologic biomarker of liver fibrosis is urgently needed. METHODS: We used a proteomics method based on 2-dimensional gel electrophoresis to identify potential fibrosis biomarkers. Serum samples from patients with varying degrees of hepatic scarring induced by infection with the hepatitis C virus (HCV) were analyzed and compared with serum from healthy controls. RESULTS: We observed the most prominent differences when we compared serum samples from cirrhotic patients with healthy control serum. Inter- alpha -trypsin inhibitor heavy chain H4 (ITIH4) fragments, alpha 1 antichymotrypsin, apolipoprotein L1 (Apo L1), prealbumin, albumin, paraoxonase/arylesterase 1, and zinc- alpha 2-glycoprotein were decreased in cirrhotic serum, whereas CD5 antigen-like protein (CD5L) and {szligbeta}2 glycoprotein I ({szligbeta}2GPI) were increased. In general, alpha 2 macroglobulin (a2M) and immunoglobulin components increased with hepatic fibrosis, whereas haptoglobin and complement components (C3, C4, and factor H-related protein 1) decreased. Novel proteins associated with HCV-induced fibrosis included ITIH4 fragments, complement factor H -related protein 1, CD5L, Apo L1, {szligbeta}2GPI, and thioester-cleaved products of a2M. CONCLUSIONS: Assessment of hepatic scarring may be performed with a combination of these novel fibrosis biomarkers, thus eliminating the need for liver biopsy. Further evaluation of these candidate markers needs to be performed in larger patient populations. Diagnosis of fibrosis during early stages will allow early treatment, thereby preventing fibrosis progression.

L56 ANSWER 2 OF 3 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2008-0364906 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 2008 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Chronic course of a hemolytic uremic syndrome caused by a deficiency of factor H-related proteins (CFHR1 and CFHR3)
AUTHOR: KOZIOLEK Michael J.; ZIPFEL Peter F.; SKERKA Christine; VASKO Radovan; GROENE Elisabeth F.; MUELLER Gerhard A.; STRUTZ Frank
CORPORATE SOURCE: Department of Nephrology and Rheumatology,

Georg-August-University Goettingen, Goettingen, Germany, Federal Republic of; Leibniz Institute for Natural Product Research and Infection Biology, Hans Knoell Institute, Department of Infection Biology and Friedrich Schiller University Jena, Jena, Germany, Federal Republic of; Department of Cellular and Molecular Pathology, German Cancer Research Institute, Heidelberg, Germany, Federal Republic of

SOURCE: Kidney international, (2008), 74(3), 384-388, 19 refs.
ISSN: 0085-2538 CODEN: KDYIA5

DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: United States
LANGUAGE: English
AVAILABILITY: INIST-15906, 354000197679700140
AN 2008-0364906 PASCAL
CP Copyright .COPYRGT. 2008 INIST-CNRS. All rights reserved.
AB CASE PRESENTATION A 36-year-old patient complained of progressing fatigue, lack of appetite, and weakness for a few weeks, for which he had been using paracetamol (acetaminophen) intermittently. He was referred to our center from another hospital with hemolysis, thrombocytopenia, and acute renal failure (ARF). On admission, the patient did not complain of any specific additional symptoms. Besides paracetamol, he had not received any other medication. The patient reported flu-like symptoms 3 months before admission. The family history was unremarkable. Physical examination revealed a pale-looking patient (180cm; 81 kg) with icteric sclerae. He was tachycardic (110 heart beats per min) and had elevated blood pressure (155/90 mm Hg). No other physical abnormalities were detectable. Laboratory investigations are depicted in Table 1. Specific analyses: von Willebrand factor cleavage protease activity 31% (40-120%), von Willebrand Factor Multimere negative, antibodies to von Willebrand Factor cleavage protease negative, factor H 614 mgl.sup.-.sup.1 (345-590 mgl.sup.-.sup.1). Western blot analyses with patient's serum revealed the presence of complement factor H (CFH) and complement factor H-like protein 1 (CFHL1), but no detectable levels of complement factor H-related proteins 1
and 3 (CFHR1 and CFHR3) (Figure 1a). Antibodies to CFHR1 were negative. Genetic analyses.sup.1 showed no CFH mutation, but revealed homozygous deletion of a 83 kb genomic fragment representing CFHR3 and CFHR1 (Figure 1 b). Kidneys were of normal size with increased density by ultrasound examination. Electrocardiography revealed ischemic changes posteroseptally, and hypertrophy of the left ventricle was diagnosed by echocardiography.

L56 ANSWER 3 OF 3 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 2007-0465924 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 2007 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Novel serum biomarker candidates for liver fibrosis in hepatitis C patients
AUTHOR: GANGADHARAN Bevin; ANTROBUS Robin; DWEK Raymond A.; ZITZMANN Nicole
CORPORATE SOURCE: Oxford Antiviral Drug Discovery Unit, Oxford Glycobiology Institute, Department of Biochemistry, University of Oxford, Oxford, United Kingdom
SOURCE: Clinical chemistry : (Baltimore, Md.), (2007), 53(10), 1792-1799, 40 refs.
ISSN: 0009-9147 CODEN: CLCHAU
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic

COUNTRY: United States
LANGUAGE: English
AVAILABILITY: INIST-7603, 354000143457800100
AN 2007-0465924 PASCAL

AB Background: Liver biopsy is currently the gold standard for assessing liver fibrosis, and no reliable noninvasive diagnostic approach is available. Therefore a suitable serologic biomarker of liver fibrosis is urgently needed. Methods: We used a proteomics method based on 2-dimensional gel electrophoresis to identify potential fibrosis biomarkers. Serum samples from patients with varying degrees of hepatic scarring induced by infection with the hepatitis C virus (HCV) were analyzed and compared with serum from healthy controls. Results: We observed the most prominent differences when we compared serum samples from cirrhotic patients with healthy control serum. Inter-α-trypsin inhibitor heavy chain H4 (ITIH4) fragments, al antichymotrypsin, apolipoprotein L1 (Apo L1), prealbumin, albumin, paraoxonase/arylesterase 1, and zinc-'2-glycoprotein were decreased in cirrhotic serum, whereas CD5 antigen-like protein (CD5L) and β2 glycoprotein I (β2GPI) were increased. In general, α2 macroglobulin (a2M) and immunoglobulin components increased with hepatic fibrosis, whereas haptoglobin and complement components (C3, C4, and factor H-related protein 1) decreased. Novel proteins associated with HCV-induced fibrosis included ITIH4 fragments, complement factor H -related protein 1, CD5L, Apo L1, β2GPI, and thioester-cleaved products of a2M. Conclusions: Assessment of hepatic scarring may be performed with a combination of these novel fibrosis biomarkers, thus eliminating the need for liver biopsy. Further evaluation of these candidate markers needs to be performed in larger patient populations. Diagnosis of fibrosis during early stages will allow early treatment, thereby preventing fibrosis progression.

=> (secreted phosphoprotein 24) and (CORONARY OR ATHEROSCLEROSIS OR ANGIOGRAPHIC OR (heart failure) or cardiovascular)
L57 0 FILE AGRICOLA
L58 0 FILE BIOTECHNO
L59 0 FILE CONFSCI
L60 0 FILE HEALSAFE
L61 0 FILE LIFESCI
L62 0 FILE PASCAL

TOTAL FOR ALL FILES
L63 0 (SECRETED PHOSPHOPROTEIN 24) AND (CORONARY OR ATHEROSCLEROSIS OR ANGIOGRAPHIC OR (HEART FAILURE) OR CARDIOVASCULAR)

=> (secreted phosphoprotein 24)
L64 0 FILE AGRICOLA
L65 3 FILE BIOTECHNO
L66 0 FILE CONFSCI
L67 0 FILE HEALSAFE
L68 3 FILE LIFESCI
L69 2 FILE PASCAL

TOTAL FOR ALL FILES
L70 8 (SECRETED PHOSPHOPROTEIN 24)

=> dup rem
ENTER L# LIST OR (END):170
PROCESSING COMPLETED FOR L70

L71 5 DUP REM L70 (3 DUPLICATES REMOVED)

=> d l71 ibib abs total

L71 ANSWER 1 OF 5 LIFESCI COPYRIGHT 2008 CSA on STN DUPLICATE 1
ACCESSION NUMBER: 2008:258361 LIFESCI
TITLE: Differences in matrix composition between calvaria and long bone in mice suggest differences in biomechanical properties and resorption
AUTHOR: van den Bos, T.; Speijer, D.; Bank, R.A.; Bromme, D.; Everts, V.
CORPORATE SOURCE: Academic Center for Dentistry Amsterdam, Universiteit van Amsterdam and Vrije Universiteit, Amsterdam, The Netherlands; E-mail: t.vandenbosumc.nl
SOURCE: Bone, (20080900) vol. 43, no. 3, pp. 459-468. ISSN: 8756-3282.
DOCUMENT TYPE: Journal
FILE SEGMENT: T
LANGUAGE: English
SUMMARY LANGUAGE: English
AB The mammalian skeleton consists of bones that are formed in two different ways: long bones via endochondral ossification and flat bones via intramembranous ossification. These different formation modes may result in differences in the composition of the two bone types. Using the 2D-difference in gel electrophoresis technique and mass spectrometry, we analyzed the composition of murine mineral-associated proteins of calvaria and long bone. Considerable differences in protein composition were observed. Flat bones (calvariae) contained more soluble collagen (8x), pigment epithelium derived factor (3x) and osteoglycin (4x); whereas long bones expressed more chondrocalcin (3x), thrombospondin- 1 (4x), fetuin (4x), secreted phosphoprotein 24 (3x), and thrombin (7x). Although cystatin motifs containing proteins, such as secreted phosphoprotein 24 and fetuin are highly expressed in long bone, they did not inhibit the activity of the cysteine proteinases cathepsin B and K. The solubility of collagen differed which coincided with differences in collagen crosslinking, long bone containing 3x more (hydroxylysine)-pyridinoline. The degradation of long bone collagen by MMP2 (but not by cathepsin K) was impaired. These differences in collagen crosslinking may explain the differences in the proteolytic pathways osteoclasts use to degrade bone. Our data demonstrate considerable differences in protein composition of flat and long bones and strongly suggest functional differences in formation, resorption, and mechanical properties of these bone types.

L71 ANSWER 2 OF 5 BIOTECHNO COPYRIGHT 2008 Elsevier Science B.V. on STN DUPLICATE
ACCESSION NUMBER: 2003:36792626 BIOTECHNO
TITLE: Biochemical characterization of the serum fetuin-mineral complex
AUTHOR: Price P.A.; Nguyen T.M.T.; Williamson M.K.
CORPORATE SOURCE: P.A. Price, Div. of Biology, University of California, San Diego, CA 92093-0368, United States. E-mail: pprice@ucsd.edu
SOURCE: Journal of Biological Chemistry, (13 JUN 2003), 278/24 (22153-22160), 29 reference(s) CODEN: JBCHA3 ISSN: 0021-9258
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 2003:36792626 BIOTECHNO

AB The present study was carried out to characterize the fetuin-mineral complex (FMC), a high molecular mass complex of calcium phosphate mineral and the proteins fetuin and matrix Gla protein (MGP) that was initially discovered in serum of rats treated with etidronate and appears to play a critical role in inhibiting calcification in vivo. Fetuin purified from the FMC contains 3.3 mol of protein-bound phosphate. There is 1.3 mg of FMC/ml of serum 6 h after etidronate injection, and the FMC is 46% fetuin and 53% mineral by mass. Formation of the FMC in the first 6 h after etidronate injection does not increase serum fetuin despite the fact that 50% of serum fetuin is associated with the FMC, and clearance of the FMC in the 9-24-h interval lowers total serum fetuin by 50%. These observations suggest that the fetuin component of the FMC is derived from fetuin initially in serum and that clearance of the FMC removes the associated fetuin from circulation. One additional protein was consistently present in all preparations of the FMC, spp24 (secreted phosphoprotein 24). This 24-kDa protein is similar in domain structure to fetuin and, like fetuin and MGP, contains several residues of phosphoserine and accumulates in bone. Exogenous spp24 associated strongly with the FMC when added to serum containing it. These observations suggest that spp24 may, like fetuin and MGP, play a role in inhibiting calcification.

L71 ANSWER 3 OF 5 BIOTECHNO COPYRIGHT 2008 Elsevier Science B.V. on STN
ACCESSION NUMBER: 1997:28107836 BIOTECHNO
TITLE: Assignment of secreted phosphoprotein 24 (SPP2) to human chromosome band 2q37→qter by in situ hybridization
AUTHOR: Swallow J.E.; Merrison W.K.; Gill P.K.; Harris S.; Dalgleish R.
CORPORATE SOURCE: Dr. R. Dalgleish, Department of Genetics, University of Leicester, University Road, Leicester LE1 7RH, United Kingdom.
E-mail: ray@le.ac.uk
SOURCE: Cytogenetics and Cell Genetics, (1997), 79/1-2 (142), 6 reference(s)
CODEN: CGCGBR ISSN: 0301-0171
DOCUMENT TYPE: Journal; Article
COUNTRY: Switzerland
LANGUAGE: English
AN 1997:28107836 BIOTECHNO

L71 ANSWER 4 OF 5 PASCAL COPYRIGHT 2008 INIST-CNRS. ALL RIGHTS RESERVED. on STN
ACCESSION NUMBER: 1998-0139673 PASCAL
COPYRIGHT NOTICE: Copyright .COPYRGT. 1998 INIST-CNRS. All rights reserved.
TITLE (IN ENGLISH): Assignment of secreted phosphoprotein 24 (SPP2) to human chromosome band 2q37 qter by in situ hybridization
AUTHOR: SWALLOW J. E.; MERRISON W. K.; GILL P. K.; HARRIS S.; DALGLEISH R.
CORPORATE SOURCE: Department of Genetics, University of Leicester, Leicester, United Kingdom
SOURCE: Cytogenetics and cell genetics, (1997), 79(1-2), p. 142, 6 refs.
ISSN: 0301-0171 CODEN: CGCGBR
DOCUMENT TYPE: Journal
BIBLIOGRAPHIC LEVEL: Analytic
COUNTRY: Switzerland
LANGUAGE: English

AVAILABILITY: INIST-10561, 354000078698530210
AN 1998-0139673 PASCAL

L71 ANSWER 5 OF 5 BIOTECHNO COPYRIGHT 2008 Elsevier Science B.V. on STN
DUPLICATE
ACCESSION NUMBER: 1995:25018425 BIOTECHNO
TITLE: Isolation and molecular cloning of a novel bone phosphoprotein related in sequence to the cystatin family of thiol protease inhibitors
AUTHOR: Hu B.; Coulson L.; Moyer B.; Price P.A.
CORPORATE SOURCE: Dept. of Biology, University of California, 9500 Gilman Drive,San Diego, CA 92093-0322, United States.
SOURCE: Journal of Biological Chemistry, (1995), 270/1 (431-436)
CODEN: JBCHA3 ISSN: 0021-9258
DOCUMENT TYPE: Journal; Article
COUNTRY: United States
LANGUAGE: English
SUMMARY LANGUAGE: English
AN 1995:25018425 BIOTECHNO
AB We describe here the isolation of a novel non-collagenous protein from the acid demineralization extract of bovine cortical bone. This 24-kDa protein is multiply phosphorylated at serine residues in Ser-X-Glu/Ser(P) sequences, a recognition motif for phosphorylation by the secretory pathway protein kinase, and we have termed this protein secreted phosphoprotein 24 (spp24). The cDNA structure of spp24 was determined by sequencing cDNA fragments obtained by reverse transcription-polymerase chain reaction, 3'-rapid amplification of cDNA ends, and screening a λgt11 cDNA library. This cDNA sequence predicts a 200-residue initial translation product which consists of a 20-residue signal sequence and the 180-residue mature spp24. Northern blot analysis using the spp24 cDNA showed that spp24 mRNA is in liver and bone but not in heart, lung, kidney, or spleen. A search of existing protein sequences revealed that the N-terminal 107 residues of mature spp24 are related in sequence to the cystatin family of thiol protease inhibitors, which suggests that spp24 could function to modulate the thiol protease activities that are known to be involved in bone turnover. Several of the proteins in the cystatin family that are most closely related to spp24 are not only thiol protease inhibitors but are also precursors to peptides with potent biological activity, peptides such as bradykinin and the neutrophil antibiotic peptides. It is therefore possible that the intact form of spp24 found in bone could also be a precursor to a biologically active peptide, a peptide which could coordinate an aspect of bone turnover.